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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,974	10/07/2003	Daryl Carvis Cromer	RPS920030119US1	4638

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EXAMINER	
VU, MICHAEL T	

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/680,974	CROMER ET AL.	
	Examiner	Art Unit	
	Michael Vu	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9,13,16-20 and 23-30* is/are rejected.

7)☒ Claim(s) *8,12,14,15,21,22 and 31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/07/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Claims 2 and 18 were misspelling a first instead of "fist".

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 - 31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-26 of copending Application No. 10/680977. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention of the pending claims encompasses a similar invention as recited in the copending claims, i.e., receiving a single mode wireless card is obvious modification of a dual mode.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7, 9-11, 13, 16-20, 23-30 are rejected under 35 U.S.C. 102(b) as being unpatentable over Quinn (US 2002/0137472).

Regarding **claims 1 and 17**, Quinn teaches a method comprising: receiving a CRUable dual mode wireless card having both an ISM radio and a U-NII radio in an interface within a wireless ready device designed for receiving a radio card (Fig. 1 prior art show dual mode, ISM=802.11b which develop by IEEE for systems that operate 2.4GHz Industrial, Scientific and Medical called ISM and U-NII=802.11a is 5.0GHz Unlicensed National Information Infrastructure called U-NII), said U-NII radio having a radio identification (ID) parameter (inherent), wherein said interface enables said U-NII radio to be coupled to and send signals to an antenna that is embedded in the device and which has an antenna identification (ID) parameter (Fig. 1 prior art, and Fig. 2 to Fig. 4c); prior to enabling use of said U-NII radio and said antenna to complete a U-NII transmission (Fig. 1 to Fig. 4c, [0004, 0012, 0013]), completing an authentication

process that verifies that said U-NII radio is an authorized radio for utilization with the antenna and within the device under U-NII standards (Fig. 1 to Fig. 4c [0034, 0035]); and when said authentication process verifies that a pairing of said radio and said antenna is authorized, switching a transmission mode of said device from ISM mode to U-NII mode [0034, 0035], which enables U-NII communication via said pairing of said antenna and said radio (Fig. 1 to Fig. 4c [0034, 0035]), wherein a U-NII transmitter meeting an FCC "integral" requirement is provided within the wireless-ready device having the embedded antenna [0007, 0008, 0012, 0013].

Regarding **claims 2 and 18**, Quiin teaches the method of claim 1, and further teaches wherein: said CRUable dual mode wireless card also comprises storage means for holding the radio ID and interface connection pins for connecting said card to said interface of said device (Fig. 4c), wherein said interface connection pins include a fist pin for connecting each of said radios to the antenna and a second pin for connecting said card to a basic input/output system (BIOS) of the device (Fig. 4c, [0013, 0014-0016]); and said step for completing an authentication process completes a radio-to-antenna and a radio-to-device authentication process, wherein only an authorized radio model is enabled within the device [0034-0035, 0057-0059].

Regarding **claims 3 and 19**, Quiin teaches the method of claim 2, and further teaches comprising: activating the ISM radio at power-on to provide default wireless transmission via ISM mode [0037, 0038]; responsive to any request for transmission that does not specify U-NII mode [0037, 0038], completing the transmission via ISM mode; and automatically disabling the ISM radio whenever a request for U-NII mode

transmission is received and the authentication process indicates the pairing of the U-NII radio and the antenna is authorized within the device, wherein only exclusive operation in ISM mode or U-NII mode is permitted within said device (Abstract, [0007, 0034]).

Regarding **claims 4, and 23-25**, Quiin teaches the method of claim 2, and further comprising: allowing a boot process being executed on the device to complete, wherein when said radio ID and the radio ID from the table does not match, said radio is disabled from operating within said device and said device is booted without U-NII transmission capability (Fig. 2, [0023, 0034]).

Regarding **claims 5 and 26**, Quiin teaches the method of claim 2, and further teaches wherein said enabling step further comprises: storing an indication of said match of radio IDs within an approval flag ([0017, claim 14 reads on); checking said approval flag for said indication prior to completing a U-NII connection from said device, wherein a request for U-NII connection is allowed to proceed only when said approval flag indicates that U-NII connection is authorized and other built-in checks are satisfied [0005, 0009-0010] which is integrating multiple wireless transceivers that support multiple communication technologies); and clearing said approval flag whenever a triggering condition is registered on the device, said triggering condition being a condition form among rebooting the device, removing the wireless module, breaking a connection between said antenna and said radio, modification/replacement of said radio, modification/replacement of said antenna [0009-0011, 0013-0014].

Regarding **claim 6**, Quiin teaches the method of claim 1, and further teaches wherein said radio ID and said antenna ID are peripheral component interconnect (PCI) identifications (IDs) (Fig. 4c, and [0004, 0016-0017]).

Regarding **claims 7, 20, and 29**, Quiin teaches the method of claim 1, and further teaches said authentication process further comprising: following a power on of said device, initiating a BIOS check of system components [0023], wherein the radio ID is read from the U-NII radio that is also electrically coupled to said BIOS [0034]; populating a table with authorized antenna-radio ID pairs for that device [0034]; retrieving the antenna ID from a storage location within said BIOS [0023]; locating the antenna ID in the table of approved radio-antenna pairs; reading an associated tabled radio ID from the approved radio-antenna pairs with the antenna ID of the embedded antenna; comparing said radio ID of the U-NII radio against the tabled radio ID for a match of radio Ids (Fig. 2, [0023, 0034] and claims 1 to 15 reads on).

Regarding **claims 9 and 27**, Quiin teaches the method of claim 2, wherein further teaches: said device comprises the antenna, the interface, which includes a BIOS interface and an antenna interface, a coax coupling the antenna interface to said antenna, a Client Manager utility, and the BIOS, which includes a table of approved radio-antenna pairings for the device [0023, 0039, 0042], and claim 1 reads on).

Regarding **claims 10 and 30**, Quiin teaches the method of claim 9, and further teaches wherein said reading and comparing steps are completed by the client manager utility [0011, 0037-0038, 0042], which provides a software key required to enable dynamic switching from ISM to U-NII transmission modes (Fig. 2, [0046, 0047,

0050]), said method further comprising: providing a table of authorized pairings of radio ID and antenna IDs within a client manager utility; initiating the comparing step; and signaling a device driver of the device when to enable an interface, which interface is required to provide wireless transmission in U-NII mode (Fig. 2, [0011, 0037-0038, 0042, 0046-0047, 0050]).

Regarding **claims 11 and 28**, Quiin teaches the method of claim 2, wherein further teaches: said device comprises the antenna, the interface, which includes a BIOS interface and an antenna interface, a coax coupling the antenna interface to said antenna, the BIOS, a device driver, a Validation Utility and a Windows register, which respectively provide a table of approved U-NII radio-antenna pairings and a table of approved wireless card IDs for the specific device [0034, 0039, 0042].

Regarding **claim 13**, Quiin teaches the method of claim 11, further comprising signaling the device driver of the device when to enable an interface, which interface is required to provide wireless transmission in U-NII mode, wherein correct software key is required to enable the device driver to dynamically switch from ISM to U-NII transmission modes (Fig. 2, [0010-0011, 0034, 0042]).

Regarding **claim 16**, Quiin teaches the method of claim 11, wherein said device is a wireless-ready computer system and said method enables heterogeneous roaming from one transmission mode to another from the wireless ready computer system utilizing approved transmitters [0045].

Allowable Subject Matter

5. Claims 8, 12, 14-15, 21-22, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding **claims 8, 21 and 31**, Quiin teaches the method of claim 1, comprising: following a determination that the radio ID of the U-NII radio matches one associated with the antenna ID, providing a secret key to a device driver to trigger the device driver to activate a switch of transmission modes from ISM to U-NII mode, wherein said device driver operates as a gatekeeper to allow only authorized radios to operate within the device, and wherein said U-NII mode is deactivated until a software key authenticates the card when the comparing step results in a match.

Regarding **claim 12**, Quiin teaches the method of claim 11, wherein said reading and comparing steps are completed by the validation utility, said method further comprising: providing a table of authorized pairings of radio ID and antenna IDs within the validation utility; populating the windows registry with a list of approved cards for that device; and following a determination that the radio ID of the U-NII radio matches one within the table, generate a secret key that is sent to the device driver to trigger the device driver to activate a switch of transmission modes from ISM to U-NII mode, wherein said device driver operates as a gatekeeper to allow only authorized radios to operate within the device.

Regarding **claims 14 and 22**, Quiin teaches the method of claim 11, said authentication process further comprising: retrieving a secret key from a device driver,

said secret key being an allowable card ID for that device; comparing said secret key against the card's ID; and enabling said radio to operate within said device only when said secret key matches the card ID, wherein U-NII transmission via the radio-antenna combination is enabled only when said radio-antenna ID pairing matches one of said approved radio/antenna ID pairs within the table and said secret key matches the ID of the connected radio card.

Regarding **claim 15**, Quiin teaches the method of claim 15, wherein said secret key is a model number of approved cards for operation within the device and said model number is associated with the radio PCI ID within the table.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Quinn US 2002/0137472
2. Hamdi US 2004/0204079
3. Jones US 6,531,985
4. Tokita US 2003/0070098
5. Nakakita US 2004/0053622
6. McBrearty US 2003/0202662
7. Hood US 6,778,844
8. Puupponen US 2004/0225786
9. Sward US 6,545,643

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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